

REMARKS

Claims 10-12, 17-21, 31-34, and 37-40 remain pending in this application, wherein only Claims 11 and 21 are independent.

Independent Claims 11 and 21 were both rejected as being obvious in view of the Takemoto patent taken together with applicants' admitted prior art. Those two claims have both been amended, however, and are now believed to be clearly patentable over the prior art. In particular, the present invention embodies a solid-state imaging device having two-dimensionally arranged first and second color pixel arrays formed on a common well region including a doped region. A well-contact connected to the doped region and well wirings are provided between the arrays, and a reference voltage is applied to the well region. As now amended the well-contacts are required to be arranged at a greater pitch than that of the pixels. This structure, illustrated, for example, in Figs. 2, 4, and 6 of applicants' drawings, makes it possible to prevent the alteration of the potential of the whole well-region and therefore the shading of the pixel signal without aid from the existence of well-contacts corresponding to each pixel.

Takemoto, on the other hand, has no disclosure corresponding to these requirements of Claims 11 and 21. More specifically, Takemoto requires well-contacts corresponding to each pixel. Thus, Takemoto has a disclosure in Fig. 4, as an example, wherein a well-contact region 30 and a wiring 28 are provided so as to hold a bias regarding a substrate and well 25 having a plurality of pixels in common. The contact region and the wiring, however, are arranged in a manner corresponding to one pixel having a photodiode comprised of portions 22 and 25. Further regarding the Takemoto

reference, if a well-contact, corresponding to one pixel as in that patent was provided, the required area for the corresponding well-contact would make it difficult to provide a sufficient area for the photodiode, thereby reducing sensitivity and causing further problems.

The other primary reference relied upon in the Office Action is the cited Yu patent, wherein a channel stop layer 27 is provided between a photodiode array 25 for sensing green color and a photodiode array 24 for sensing blue color. Yu, however, has no disclosure of any well-contact which applies a constant voltage.

For all of these various reasons applicants submit that the amended claims are clearly patentably distinct over the prior art and are in condition for allowance.

Accordingly, a formal Notice of Allowance is respectfully requested.

In view of the foregoing amendments and remarks, Applicants respectfully request favorable reconsideration and allowance of the present application.

Applicant's undersigned attorney may be reached in our New York office by telephone at (212) 218-2100. All correspondence should continue to be directed to our below listed address.

Respectfully submitted,


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